

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently amended) A method of enabling voice control of an apparatus provided with a voice-control subsystem including a speech recognizer, the method comprising ~~involving at least the steps of:~~

(a) detecting when a user is looking towards the apparatus by using a camera system mounted on the user's head and arranged to point in the direction the user is facing or looking, images produced by the camera system being processed by an image processing subsystem to determine if the camera system is pointing ~~user is looking~~ towards the apparatus; and

(b) initially enabling voice control of the apparatus by its voice-control subsystem only when the user is detected in step (a) as looking towards the apparatus.

2. (original) A method according to claim 1, wherein the apparatus only remains enabled for voice control whilst the user continues to be detected in (a) as looking towards the apparatus.

3. (original) A method according to claim 1, further involving:

- detecting when the user is speaking, and
- where the user is detected as speaking whilst the apparatus is initially enabled for voice control, continuing enablement of the apparatus for voice control following the user ceasing to look towards the apparatus but only whilst the user continues speaking and for a timeout period thereafter, recommencement of speaking by the user during this timeout period continuing enablement of voice control with timing of the timeout period being reset.

4. (original) A method according to claim 1, further involving:

- detecting when the user is speaking and determining characteristics of the user's

voice;

- where the user is detected as speaking whilst the apparatus is initially enabled for voice control, continuing enablement of the apparatus for voice control following the user ceasing to look towards the apparatus but only in respect of a voice having the same characteristics as that of the voice detected whilst the apparatus was initially enabled, and only whilst that voice continues speaking and for a timeout period thereafter, recommencement of speaking by the same voice during this timeout period continuing enablement of voice control with timing of the timeout period being reset.

5-7. (canceled)

8. (currently amended) A method according to claim ~~17~~, wherein the apparatus carries an identifying mark that is used to identify the apparatus to the image processing subsystem.

9. (original) A method according to claim 8, wherein the identifying mark takes the form of a perspective invariant bar code.

10. (original) A method according to claim 8, wherein the identifying mark takes the form of an encoded optical or infrared signal.

11. (original) A method according to claim 8, wherein the identifying mark encodes a communications address at which the apparatus can be contacted.

12-21. (canceled)

22. (currently amended) An arrangement for enabling voice control of an apparatus provided with a voice-control subsystem including a speech recognizer, the arrangement comprising:

- detection means for detecting when the user is looking towards the apparatus, the detection means comprising:

- a camera system mounted on a user's head and arranged to point in the direction the user is facing or looking, and
- image processing means for processing images produced by the camera system to determine if the camera system is pointing ~~user is looking~~ towards the apparatus ; and
- enablement control means for initially enabling voice control of the apparatus by its voice-control subsystem only if the detection means indicate that the user is looking towards the apparatus.

23. (original) An arrangement according to claim 22, wherein the control means is operative to keep the apparatus enabled for voice control only whilst the detection means continues to detect the user looking towards the apparatus.

24. (original) An arrangement according to claim 22, further comprising a speaking detector for detecting when a user is speaking, the control means comprising:

- initial-enablement means for effecting the said initial enabling of the apparatus for voice control;
- delayed-disablement means including timing means for timing a timeout period; and
- means for activating the delayed-disablement means upon the speaking detector detecting a user speaking whilst the apparatus is initially enabled by the initial-enablement means;

the delayed-disablement means, when activated, being operative to keep the apparatus enabled for voice control following the detection means ceasing to detect that the user is looking towards the apparatus but only whilst the speaking detector continues to detect that the user is speaking and for the duration thereafter of the said timeout period as timed by the timing means, the delayed-disablement means being responsive to the speaking detector detecting recommencement of speaking by the user during this timeout period to reset timing of the timeout period.

25. (currently amended) An arrangement according to claim 22, further comprising a

speaking detector for detecting when a user is speaking, and a voice analyzer ~~analiser~~ for determining characteristics of the user's voice, the control means comprising:

- initial-enablement means for effecting the said initial enabling of the apparatus for voice control;

- delayed-disablement means including timing means for timing a timeout period; and

- means for activating the delayed-disablement means upon the speaking detector detecting a user speaking whilst the apparatus is initially enabled by the initial-enablement means;

the delayed-disablement means, when activated, being operative to keep the apparatus enabled for voice control following the detection means ceasing to detect that the user is looking towards the apparatus but only:

- in respect of a voice having the same characteristics, as determined by the voice analyzer ~~analiser~~, as that of the detected voice giving rise to activation of the delayed disablement means; and

- whilst the voice continues without a break greater than said timeout period as timed by the timing means.

26-28. (canceled)

29. (currently amended) An arrangement according to claim ~~22~~28, wherein the image processing means is operative to recognize identifying marks of a predetermined type carried by the apparatus.

30. (original) An arrangement according to claim 29, wherein the said predetermined type of identifying mark is an invariant bar code.

31. (original) An arrangement according to claim 29, wherein the said predetermined type of identifying mark is an encoded optical or infrared signal.

32. (currently amended) An arrangement according to claim ~~22~~28, wherein the said

predetermined type of identifying mark is an encoded communications address at which the apparatus can be contacted.

33-44. (canceled)

45. (previously presented) An installation accommodating at least one said apparatus, the installation including an arrangement according to claim 52.

46-49. (canceled)

50. (previously presented) A method according to claim 1 applied in an environment including multiple apparatus's each with its own voice-control subsystem, step b) including communicating enablement signals to the apparatus determined in step a) as being looked towards by the user.

51. (previously presented) A method according to claim 1, wherein step a) is carried out by equipment carried by the user, step b) including the sending of enablement signals from this equipment to the apparatus to be initially enabled.

52. (previously presented) An arrangement according to claim 11, wherein the detection means is incorporated in equipment intended to be carried by the user, and the enablement control means comprises:

- a communications subsystem for sending enablement signals from this equipment to the apparatus, and
- control functionality at the apparatus which is responsive to the receipt of said enablement signals at the apparatus to enable the apparatus for voice control by the voice control subsystem.